NC Wildlife Resources Commission

Information Technology Plan

For 2014-2016 Biennium

By

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NC Wildlife Resources Commission

Prepared: September 30, 2014

Contents

1 INTRODUCTION

1.1 PURPOSE

The purpose of this document is to provide agency data for the Information Technology Plan for the 2014-2016 Biennium to the North Carolina State Chief Information Officer (SCIO) as required by G.S. 147-33.72B. The statute mandates that each agency submit a technology plan to the SCIO by October 1 of each even-numbered year. The State Information Technology Plan (Plan) is required to cover a five-year time period. To properly inform the Plan, agency plans are also required to cover a five-year time period.

1.2 ROADMAP

Goal	Objective	Initiative	Description	Funding Mechanism
Make agency services more accessible and efficient for all internal and external technology customers.	Enhance mobile accessibility for external customers.	Responsive Design	Convert WRC agency website to responsive design model.	Agency Receipts
		Downloadable Applications	Create downloadable applications for mobile device users for maps, regulations, and other appropriate information and applications.	Agency Receipts
		Enhance mobile functionality	Enhance mobile functionality for license and permit purchases and big game reporting.	Agency Receipts
	Enhance mobile access for internal WRC staff.	Existing Applications	Selectively convert existing applications to mobile-enabled functionality.	Agency Receipts
		New Applications	Create downloadable applications for use by agency staff where realtime connectivity is not required.	Agency Receipts
Continue to upgrade	Refresh existing desktop	Windows 7/	Complete Windows 7 and	Agency

Goal	Objective	Initiative	Description	Funding Mechanism
existing systems with more current technology.	and office productivity environment	Office 365	Office 365 conversion as part of Enterprise Office 365 initiative.	Receipts
		Sharepoint/ OneDrive/ Lync	Continue transition to Sharepoint, OneDrive, and Lync for file sharing and collaboration within the agency and across all partner agencies.	Agency Receipts
	Refresh existing server and database environment.	Convert Servers	Convert remaining Microsoft Server 2003 environments to Microsoft Server 2008.	Agency Receipts
		Convert Databases	Convert SQL Server environment to SQL Server 2012.	Agency Receipts
Evaluate remote agency facilities and sites for technology upgrades.	Evaluate existing and planned remote WRC facilities and sites for network and wireless needs.	Analyze Existing Sites	Analyze all existing remote facilities and sites for capacity and usage.	Agency Receipts
		Analyze New Sites	For all new sites, analyze capacity and usage plans to determine best immediate and long term technology options.	Agency Receipts
	Evaluate existing and planned remote WRC facilities and sites for telecommunications needs.	Analyze Existing Sites	Analyze all existing remote facilities and sites for capacity and usage.	Agency Receipts
		Analyze New Sites	For all new sites, analyze capacity and usage plans to determine best immediate and long term technology options.	Agency Receipts
Implement ALVIN archiving and data warehousing environment.	Implement ALVIN database archival process	Research Options	Research archival options and limitations.	Agency Receipts
		Create Data Warehouse	Create data warehouse environment for reporting and analytics.	Agency Receipts

2 NC WILDLIFE RESOURCES COMMISSION IT PLAN EXECUTIVE SUMMARY

The North Carolina Wildlife Resources Commission (WRC) is the state government agency created by the General Assembly in 1947 to conserve and sustain the state's fish and wildlife resources through research, scientific management, wise use, and public input.   The Commission is the regulatory agency responsible for the enforcement of North Carolina fishing, hunting, trapping and boating laws.   The sale of hunting and fishing licenses, vessel registration and titling fees, federal grants and other receipts provide financial support of the agency.   The Commission has an operational budget of approximately $75 million and employs over 650 fulltime men and women across the state, including wildlife and fisheries biologists and technicians, wildlife officers, conservation educators, and public information, customer service, information technology, and administrative professionals.

WRC's function, purpose, and duty shall be to manage, restore, develop, cultivate, conserve, protect, and regulate the wildlife resources of the State of North Carolina, and to administer the laws relating to game, game and freshwater fishes, and other wildlife resources enacted by the General Assembly to the end that there may be provided a sound, constructive, comprehensive, continuing, and economical game, game fish, and wildlife program directed by qualified, competent, and representative citizens, who shall have knowledge of or training in the protection, restoration, proper use and management of wildlife resources.

WRC's IT department is responsible for researching technology options, implementing appropriate solutions, and supporting and maintaining infrastructure and software to increase the level and efficiency of our service to agency personnel and our external customers.   This is accomplished through several internally developed applications including ALVIN (Automated License and Vessel Information Network), FAMRS (Federal Assistance Management Reporting System), PAWS (Portal Access to Wildlife Systems), and agency Internet and Intranet sites (www.ncwildlife.org and www.insidewrc.org).

3 GUIDANCE

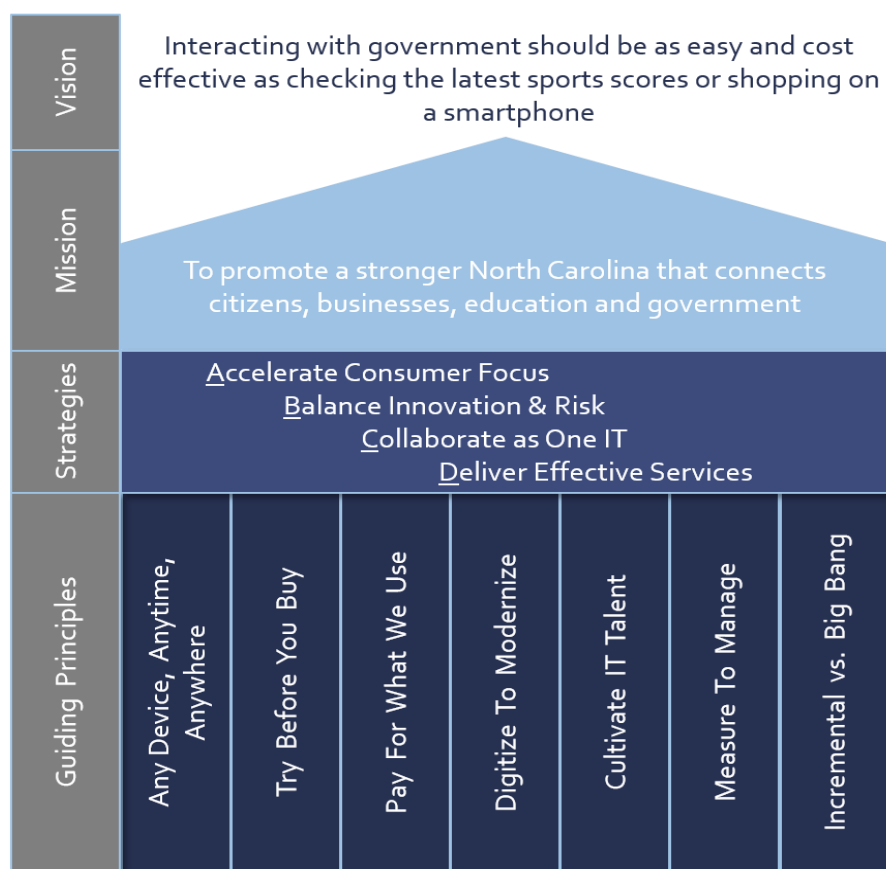## 3.1 SCIO GUIDANCE

IT Vision

Making government services more accessible and efficient for all consumers is the foundation of the One IT strategy.

IT Mission

Promoting a stronger North Carolina that connects citizens, businesses, education, and government is the mission of IT.

IT Strategies

Strategies focus organizations to achieve complicated goals or objectives. With an eye to the future while sustaining current foundational requirements, the SCIO has adopted the "ABC" strategy to fix and modernize IT.

Vision

Interacting with government should be as easy and cost effective as checking the latest sports scores or shopping on a smartphone

Mission

To promote a stronger North Carolina that connects citizens, businesses, education and government

Strategies

Accelerate Consumer Focus
Balance Innovation & Risk
Collaborate as One IT
Deliver Effective Services

Guiding Principles

Any Device, Anytime, Anywhere | Try Before You Buy | Pay For What We Use | Digitize To Modernize | Cultivate IT Talent | Measure To Manage | Incremental vs. Big Bang

IT Vision, Mission, and Strategies

	Strategy	Intended to:
A.	Accelerate Consumer Focus	Embrace the consumerization of IT with a focus on the requirements of the consumer of technology
B.	Balance Innovation and Risk	Try newer technologies while managing enterprise risk
C.	Collaborate as One IT	Work as a team to accomplish our mission
D.	Deliver Effective Operations	Focus on achieving business outcomes through effective and efficient technology delivery

In addition to the seven guiding principles outlined above, the SCIO's Cabinet Unite IT Strategy focuses strongly on collaborative IT governance, big data and analytics (to include, but not limited to, work with GDAC and GIS), IT operations, and innovation.

The table below outlines the six IT business capabilities and five IT organizational capabilities highlighted in the Cabinet Unite IT Strategy.

Business Capabilities	Organizational Capabilities
Digital Focus	Collaborative IT Governance
Big Data and Analytics	Strategic Planning and Architecture
Enterprise Resource Planning	IT Program and Project Management
Application and Service Modernization	Innovation
Risk Management and Security	Talent Development and Management
IT Operations	

Please consider these areas, along with the seven guiding principles and your agency-specific goals and objectives when creating agency IT goals and objectives.

4 NC WILDLIFE RESOURCES COMMISSION VISION, MISSION, VALUES AND GOALS

4.1 VISION

The NC Wildlife Resources Commission (WRC) is providing safe, comprehensive, effective, and efficient fisheries, wildlife, and boating programs that:

Conserve the diversity and abundance of the State's wildlife resources.

Provide diverse opportunities for all citizens regardless of age or physical abilities to access and enjoy hunting, angling, boating and other wildlife-associated experiences.

Demonstrate to the citizens of North Carolina, through education and communication, the critical role of wildlife-management in sustaining the quality of our wildlife resources and their habitats.

Sustain working lands and their associated wildlife communities.

Have a strong and unequivocal statutory base that supports constituent needs and agency sustainability.

Feature strong partnerships with other natural resource entities to complement the mission of the WRC and leverage resources to achieve that mission.

Are financially secure through diverse, dedicated, and ample funding.

Are based on sound science.

4.2 MISSION

To conserve North Carolina's wildlife resources and their habitats and provide programs and opportunities that allow hunters, anglers, boaters and other outdoor enthusiasts to enjoy wildlife-associated recreation.

4.3 VALUES

Agency values have not been officially defined.

4.4 AGENCY GOALS

4.4.1 **GOAL 1: All North Carolina citizens have the opportunity for safe and readily available participation in hunting, fishing, boating and other wildlife-related activities.**

4.4.1.1 *Advocate for legislation the supports wildlife conservation.*

4.4.1.2 *Increase public access to private lands and waterways.*

4.4.1.3 *Partner with other agencies, organizations, and local governments to incorporate wildlife resources in land planning, tourism and agro-tourism initiatives.*

4.4.1.4 *Reduce wildlife-related hunting and boating incidents and violations.*

4.4.2 **GOAL 2: Expand the constituency base by providing and promoting opportunities for every adult and child, regardless of physical abilities, to experience North Carolina's wildlife resources.**

4.4.2.1 *Provide expanded hunting, shooting, angling, and wildlife conservation courses in the elementary schools.*

4.4.2.2 *Increase the public's and various stakeholders' understandings of the N.C. Wildlife Resources Commission and its conservation programs.*

4.4.2.3 *Expand opportunities for all wildlife-associated recreation.*

4.4.2.4 *Increase opportunities for disabled sportsmen and women to participate in all forms of wildlife-associated recreation.*

4.4.2.5 *Utilize a customer-service model to administer and deliver the N.C. Wildlife Resources Commission programs and services.*

4.4.3 GOAL 3: Conserve and enhance the abundance and diversity of the fish and wildlife resources of North Carolina.

4.4.3.1 Implement the recommendations of the NC Wildlife Action Plan

4.4.3.2 Emphasize best available science in the application of fish and wildlife management programs.

4.4.3.3 Promote habitat protection through land acquisition and preservation, impact assessment and mitigation, restoration and enhancement, regulation, and conservation-based development.

4.4.3.4 Evaluate and improve the effectiveweww of regulatory programs designed to promote wildlife conservation.

4.4.3.5 Establish a comprehensive framework to ensure sustainable wildlife resources within changing climatic conditions and expanding human populations.

4.4.4 GOAL 4: The WRC is recognized as a leader in sustaining working lands, conserving wildlife habitats and species diversity, and maintaining the hunting and fishing heritage of North Carolina.

4.4.4.1 Enhance partnerships with land-funding agencies/organizations and other land-management agencies.

4.4.4.2 Establish a broad conservation vision within state government agencies and among an expanded constituency base.

4.4.4.3 Foster partnerships among constituency groups to support the N.C. Wildlife Resources Commission mission.

4.4.5 GOAL 5: Communicate, educate, and market wildlife conservation and the role of hunting and fishing in effective wildlife management programs.

4.4.5.1 Develop a legislative agenda that communicates a common message to legislators regarding issues critical to the N.C. Wildlife Resources Commission.

4.4.5.2 Enhance and expand existing school programs that promote awareness of wildlife resources and conservation.

4.4.5.3 Develop and employ marketing strategies to secure broad public support and an expanding constituency base for the agency mission.

4.4.6 **GOAL 6: WRC operates under a sound funding model that meets resource and constituent needs and supports current and future programs and new populations' needs.**

4.4.6.1 *Leverage and diversify cooperative funding programs through expanded and innovative partnerships.*

4.4.6.2 *Review and revise fees and fee-based programs to complement the vision of the N.C. Wildlife Resources Commission.*

4.4.6.3 *Develop and implement an endowment program with the focus on non-game programs and conservation.*

4.4.7 **Create a work environment where priorities are clear; the decision-making process is efficient and effective; and employees feel a sense of creativity, accountability, value and satisfaction in their achievements and their contributions to the agency's mission.**

4.4.7.1 *Improve internal coordination/communications to provide transparency in decision making and program implementation.*

4.4.7.2 *Identify and review core processes to ensure efficiency and effectiveness and evaluate how rules and processes are supporting the needs of the resources.*

4.4.7.3 *Provide opportunities and support programs for employee development.*

5 NC WILDLIFE RESOURCES COMMISSION IT VISION, MISSION, AND VALUES

5.1 IT VISION

The WRC IT Division is leveraging technology solutions to provide the best possible tools, services and support to internal customers and partners who protect, maintain, and enhance our State's wildlife resources and to external partners and customers who enjoy wildlife-associated recreation.

5.2 IT MISSION

To provide technology, consulting, and support to promote the work of WRC staff and partners in conserving North Carolina's wildlife resources and their habitats and providing programs and opportunities that allow outdoor enthusiasts to enjoy wildlife-associated recreation.

5.3 IT VALUES

IT values have not been officially defined.

6 NC WILDLIFE RESOURCES COMMISSION IT GOALS, OBJECTIVES AND INITIATIVES

6.1 GOAL 1: MAKE AGENCY SERVICES MORE ACCESSIBLE AND EFFICIENT FOR ALL INTERNAL AND EXTERNAL TECHNOLOGY CUSTOMERS.

6.1.1 Objective 1: Enhance mobile accessibility for external customers.

6.1.1.1 *Initiative 1: Convert WRC agency website to responsive design model, adjusting the formatting of all screens and data based on the device used to access the site.*

6.1.1.2 *Initiative 2: Create downloadable applications for mobile devices users for maps, regulations, and other appropriate information and applications.*

6.1.1.3 *Initiative 3: Enhance mobile functionality for license/permit purchases and big game reporting.*

6.1.2 Objective 2: Enhance mobile access for internal WRC staff.

6.1.2.1 *Initiative 1: Selectively convert existing applications to mobile-enabled functionality.*

6.1.2.2 *Initiative 2: Create downloadable applications for use by agency staff where realtime connectivity is not required.*

6.2 GOAL 2: CONTINUE TO UPGRADE EXISTING SYSTEMS WITH MORE CURRENT TECHNOLOGY.

6.2.1 Objective 1: Refresh existing desktop and office productivity environment.

6.2.1.1   Initiative 1: Complete Windows 7 and Office 365 conversion as part of Enterprise Office 365 initiative.

6.2.1.2   Initiative 2: Continue transition to Sharepoint, OneDrive, and Lync for file sharing and collaboration within the agency and across all partner agencies.

6.2.2 Objective 2: Refresh existing server and database environment.

6.2.2.1   Initiative 1: Convert remaining Microsoft Server 2003 environments to Microsoft Server 2008.

6.2.2.2   Initiative 2: Convert SQL Server environment to SQL Server 2012.

6.3 GOAL 3: EVALUATE REMOTE AGENCY FACILITIES AND SITES FOR TECHNOLOGY UPGRADES.

6.3.1 Objective 1: Evaluate existing and planned remote WRC facilities and sites for network and wireless needs.

6.3.1.1   Initiative 1: Analyze all existing remote facilities and sites for capacity and usage.

6.3.1.2   Initiative 2: For all new sites, analyze capacity and usage plans to determine best immediate and long term technology options.

6.3.2 Objective 2: Evaluate existing and planned remote WRC facilities and sites for telecommunications needs.

6.3.2.1   Initiative 1: Analyze all existing remote facilities and sites for capacity and usage.

6.3.2.2   Initiative 2. For all new sites, analyze capacity and usage plans to determine best immediate and long term technology options.
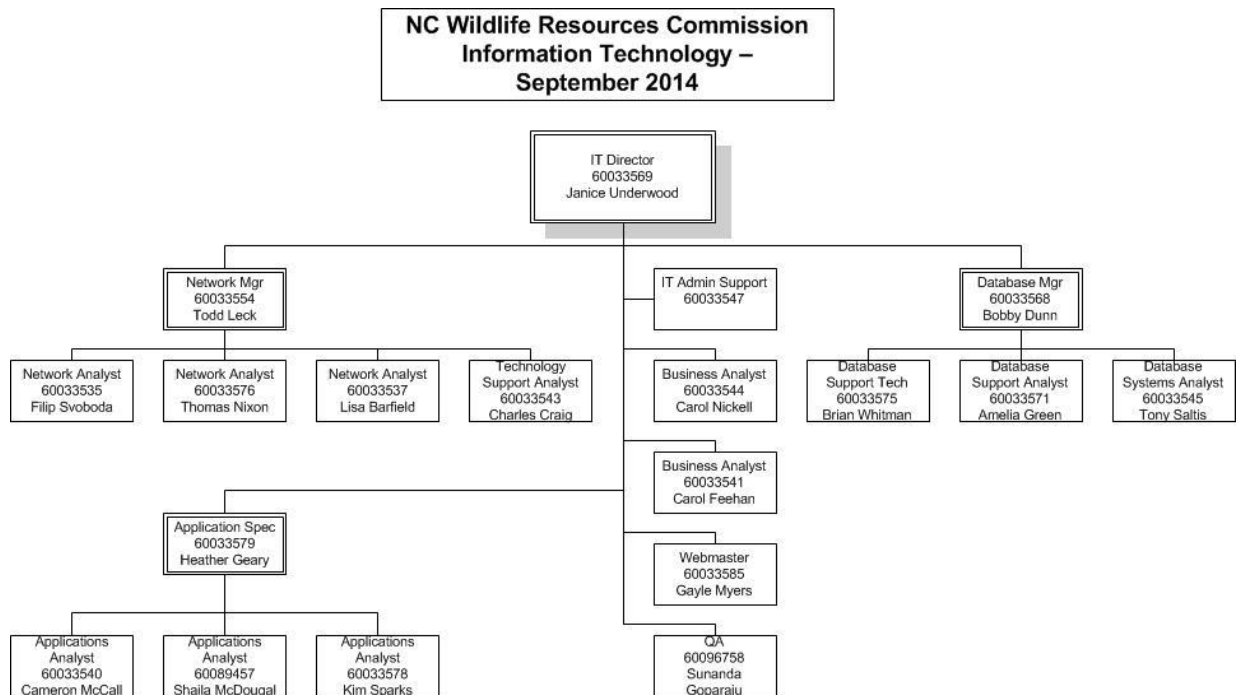
6.4 GOAL 4: IMPLEMENT ALVIN ARCHIVING AND DATA WAREHOUSING ENVIRONMENT.

6.4.1 Objective 1: Implement ALVIN database archival process.

6.4.1.1   Initiative 1: Research archival options and limitations.

6.4.1.2   Initiative 2: Create data warehouse environment for reporting and analytics.

7 NC WILDLIFE RESOURCES COMMISSION IT ORGANIZATIONAL STRUCTURE (REPORTING STRUCTURE)

NC Wildlife Resources Commission
Information Technology –
September 2014

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8 ADDITIONAL AGENCY REQUIREMENTS

8.1 INNOVATIVE FUNDING SOLUTIONS

8.2 OPPORTUNITIES FOR STATEWIDE INITIATIVES

Appendix A: List of Major IT Projects

This purpose of this section is to provide list of major IT projects and applications (>$250,000) that are in progress or planned in this biennium. The table below maps each project to overall goals and strategies.

Project Name	Short Description	Related Goals and Objectives	Summary of Anticipated Benefits	Approximate Timeframe
ALVIN	Automated License and Vessel Information Network	Goals 1, 2, and 4 – Increasing accessibility, efficiency, technology, and archival and data warehousing	ALVIN is a framework for much of what the agency does. It is not a new project, but an ongoing maintenance and support issue based on agency needs, new initiatives, and legislative mandates related to hunting, fishing, boating, and financial issues.	Ongoing

End of document